

### **REMARKS**

Applicants submit this paper in response to the non-final Office Action dated September 3, 2009. In the Office Action, claims 1-3, 5, 7, and 10-14 stand rejected under 35 U.S.C. § 103(a) as being obvious over Correggi et al. (U.S. Patent App. No. 2003/0168314, hereinafter "Correggi") in view of Jones (U.S. Patent No. 3,780,884), Lee et al. (U.S. Patent No. 5,868,549, hereinafter "Lee"), and Rogers (U.S. Patent No. 2,864,516). Claims 4, 8, and 15-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims.

In view of the foregoing, claims 4 and 14 are cancelled, claims 1, 5, 11, 12, and 13 are amended, and claims 21-24 are added. Therefore, claims 2-3, 5, 7-8, 10-12, and 15-24 are currently pending in the application. Claims 5, 11, and 12 are amended to correct inconsistent claim language. Support for the amendments to independent claims 1 and 13 can be found in original claims 4 and 14, for example. Support for new claims 21-24 can be found in original claims 1-3, 5, 7, and 8, for example. Therefore, no new matter has been added. In keeping with the foregoing amendments and the following arguments, reconsideration and allowance of the remaining pending claims is respectfully requested.

#### **Claim 1**

As mentioned above, Applicants acknowledge with appreciation the Examiner's indication that claim 4 would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims. Accordingly, claim 1 has been amended to include the limitations of claim 4, and amended claim 1 is therefore allowable.

Claims 2-3, 5, 7-8, and 10-12 directly or indirectly depend from allowable claim 1 and are allowable for at least this reason.

#### **Claim 13**

Claim 13 has been amended to include the limitations of claim 14, and amended claim 13 recites, in part, a transposing device for forming layers of plastic bottles supplied in rows, a pallet loader transferring the layers of plastic bottles to pallets, a conveyor zone arranged between the transposing device and the pallet loader for the layers of plastic bottles formed

by the transposing device, and a distributor provided upstream from the transposing device that continuously forms several outgoing rows of plastic bottles from an incoming row of plastic bottles, wherein the distributor has a continuously revolving conveyor chain for a single-row feed of plastic bottles, a plurality of clamping star wheels revolving in synchronization being connected one of directly or indirectly downstream from the conveyor chain, removing the plastic bottles individually from the conveyor chain and distributing them among multiple paths.

Neither Correggi, Jones, Lee, nor Rodgers, individually or in combination, discloses or suggests several of the limitations of amended claim 13.

Turning first to Correggi, Correggi teaches a palletizer that includes a loader carriage 10 having a plurality of horizontal, parallel corridors 11 that are each arranged to receive articles 9 (such as plastic bottles). *See* Correggi, para [0029] and Fig. 1. A number of stationary feed channels 4 supply the articles 9 in a direction parallel to the corridors 11. *See* Correggi, para [0031] and Fig. 1. Because the number of feed channels 4 is less than the number of corridors 11, the loader carriage 10 translates in a direction normal to the feed channels 4 to allow each of the corridors 11 to be filled by the articles 9. *See* Correggi, paras [0030], [0031], and [0065]. When all of the corridors 11 are full, the loader carriage 10 stops moving and a pair of side walls 31 extending parallel to the corridors 11 of the loader carriage 10 transversely converge to lock each row of articles 9 in position within each corridor 11. *See* Correggi, paras [0037], [0040], and [0065] and Fig. 5. A movable transfer head 50 (part of the transfer means 5) descends from above the stationary loader carriage 10 and gripping means 52 grasps the articles 9 within the corridors 11 of the loader carriage 10. *See* Correggi, paras [0033], [0044], and [0066]. The transfer head 50 then vertically removes the articles 9 from the loader carriage 10 and transfers the articles 9 to the receiver station 2. *See* Correggi, paras [0040], [0066], and [0068]. As the articles 9 are moved by the transfer head 50 to the receiver station, the loader carriage 10 resumes moving relative to the feed channels 4 to repopulate the corridors 11 for the next approach of the transfer head 50. *See* Correggi, para [0068].

As stated above, Correggi does not disclose or suggest several of the limitations of amended claim 13. Specifically, Correggi does not disclose or suggest a distributor which is

provided upstream from a transposing device that continuously forms several outgoing rows of plastic bottles from an incoming row of plastic bottles. As defined in the specification, a distributor “permits reliable loading of the transposing device with multiple rows of objects, formed from an outgoing single row emerging at a high speed from a manufacturing machine.” *See* substitute specification, para [0008]. While Correggi teaches that multiple rows of articles 9 (within the feed channels 4) are formed, Correggi is silent as to a distributor forming such multiple rows of articles 9 from a single row of articles 9 emerging at high speed from a manufacturing machine. *See* Correggi, Fig. 1. Indeed, the Office has not identified any mechanism of Correggi that corresponds to such a distributor. *See* Office Action, pages 2-4.

Because Correggi is silent as to a distributor continuously forming multiple rows of plastic bottles from a single row of plastic bottles, Correggi does not disclose or suggest a distributor having a continuously revolving conveyor chain for a single-row feed of plastic bottles, as recited in amended claim 13. Similarly, Correggi also does not disclose a plurality of clamping star wheels revolving in synchronization connected one of directly or indirectly downstream from the conveyor chain, as recited in amended claim 13. Finally, Correggi does not teach the removing the plastic bottles individually from the conveyor chain and distributing them among multiple paths. Therefore, Correggi does not disclose or suggest several of the limitations of amended claim 13.

Moreover, the above-identified limitations missing from Correggi are not disclosed in Jones. Specifically, Jones teaches an article transfer device having a vertically-displaceable platform 4 and a first conveyor 6 positioned to permit articles, such as cartons 8 carried by a pallet 10, to be moved from the first conveyor 6 to the platform 4 (or vice versa). *See* Jones, col. 2, lines 52-58 and Fig. 1. A gripping unit 14 is disposed above the platform 4, and using a plurality of vacuum cups 18, the gripping unit 14 transfers a layer of the cartons 8 from the pallet 10 to a moving shuttle 48. *See* Jones, col. 4, lines 10-43 and Fig. 1. The shuttle 48 then moves to transfer the layer of cartons 8 to a second conveyor 44. *See* Jones, col. 4, lines 10-43 and Fig. 1. Alternatively, the process can be reversed to unload the cartons 8 from the second conveyor 44 and deposit the cartons 8 on the pallet 10. *See* Jones, col. 4, lines 41-43 and Fig. 1.

Jones does not disclose or suggest a distributor provided upstream from a transposing device (asserted by the Office to correspond to the second conveyor 44) to continuously form several outgoing rows of plastic bottles from an incoming row of plastic bottles, as recited in amended claim 13. First, Jones does not disclose plastic bottles, but instead discloses rectangular cartons 8. Second, Jones does not disclose that rows of cartons 8 are continuously formed in several outgoing rows from an incoming row of cartons, and therefore does not suggest a distributor to form such rows.

Because Jones does not teach a distributor or plastic bottles, Jones necessarily does not disclose or suggest a distributor having a continuously revolving conveyor chain for a single-row feed of plastic bottles, as recited in amended claim 13. Similarly, Jones also does not disclose a plurality of clamping star wheels revolving in synchronization connected one of directly or indirectly downstream from the conveyor chain, as recited in amended claim 13. Finally, Jones does not teach removing the plastic bottles individually from the conveyor chain and distributing them among multiple paths. Therefore, Jones does not disclose or suggest the limitations of amended claim 13 missing from Correggi.

Furthermore, the above-identified limitations of amended claim 13 missing from Correggi and Jones are not disclosed in Rogers. Rogers teaches an overhead track system to transfer crossties from trams C to elongated conveyors 10, 11 via a hook grapple 14 secured to a traveling hoist 13 that travels along an overhead track system 16. *See Rogers*, col. 2, lines 51-68 and Fig. 1.

Rogers does not disclose or suggest a distributor provided upstream from a transposing device to continuously form several outgoing rows of plastic bottles from an incoming row of plastic bottles, as recited in amended claim 13. Specifically, Rogers does not disclose plastic bottles, but only discloses wooden crossties. *See Rogers*, col. 2, lines 51-68 and Fig. 1. Moreover, Rogers teaches that the crossties are preloaded from stationary trams C and are transferred one-by-one to the elongated conveyors 10, 11—Rogers therefore does not disclose that rows of crossties are continuously formed in several outgoing rows from an incoming row, and therefore does not suggest a distributor to form such rows. *See Rogers*, col. 2, lines 51-68 and Fig. 1. Consequently, Rogers does not disclose a distributor having a continuously revolving conveyor chain for a single-row feed of plastic bottles, as

recited in amended claim 13. Similarly, Rogers also does not disclose a plurality of clamping star wheels revolving in synchronization connected one of directly or indirectly downstream from the conveyor chain, as recited in amended claim 13. Also, Rogers does not teach the removing the plastic bottles individually from the conveyor chain and distributing them among multiple paths.

Finally, the above-identified limitations of amended claim 13 missing from Correggi, Jones, and Rogers are not disclosed in Lee. Specifically, Lee teaches a palletizer assembly 30 having an upper conveyor assembly 32 designed to receive articles (such as pet food bags) in a single-file line, to arrange the articles in a pattern, and to deposit the layers one at a time on an indexing pallet hoist 84 of a lower conveyor assembly 34 to form a stack. *See* Lee, col. 5, lines 30-47 and Figs. 1-4.

Lee does not disclose or suggest a distributor provided upstream from a transposing device to continuously form several outgoing rows of plastic bottles from an incoming row of plastic bottles, as recited in amended claim 13. First, Lee does not disclose plastic bottles, but instead discloses pet food bags. *See* Lee, col. 5, lines 30-47. Second, Lee does not disclose a distributor to continuously form several rows of bags from an incoming row of bags. Rather, Lee is silent as to how the outgoing rows of bags are formed.

Because Lee does not teach a distributor or plastic bottles, Lee necessarily does not disclose or suggest a distributor having a continuously revolving conveyor chain for a single-row feed of plastic bottles, as recited in amended claim 13. Similarly, Lee also does not disclose a plurality of clamping star wheels revolving in synchronization connected one of directly or indirectly downstream from the conveyor chain, as recited in amended claim 13. Finally, Lee does not teach removing the plastic bottles individually from the conveyor chain and distributing them among multiple paths. Therefore, Lee does not disclose or suggest several of the limitations of amended claim 13.

Because neither Correggi, Jones, Rogers, nor Lee, alone or in combination, discloses or suggests the above-identified limitations of amended claim 13, amended claim 13 is allowable.

In addition to the argument above, the Applicants respectfully disagree with the Office's assertion that Correggi discloses a conveyor zone situated between the transposing

device and the pallet loader. In the Office Action, the Office asserts that the movable transfer head 50 of Correggi corresponds to the conveyor zone, and the transfer means 5 of Correggi corresponds to the pallet loader. *See* Office Action, page 2, lines 23-25. However, Correggi teaches that the transfer head 50, along with a mover means 51, makes up the transfer means 5. *See* Correggi, para [0033]. Because the pallet loader is asserted to correspond to the transfer means 5, the pallet loader must also necessarily correspond to all of the individual parts that make up the transfer means 5—namely the transfer head 50 and the mover means 51. Consequently, the movable transfer head 50 (asserted to be the conveyor zone) cannot *be situated between* a transposing device and the transfer means 5 (asserted to correspond to the pallet loader) because the movable transfer head 50 is a sub-component of the transfer means 5. Accordingly, Correggi does not disclose a conveyor zone situated between the transposing device and the pallet loader.

As a final matter, in rejecting previously presented claims 13 and 14, the Office does not provide a clear articulation of the reasons why the claimed invention would have been obvious. Specifically, the Office conclusively asserts that previously presented claims 13 and 14 (as well as claims 1-3, 5, 7, and 10-12) are rejected as unpatentable over Correggi in view of Jones, Lee, and Rogers, but the Office only discusses the limitations of claim 1 in the argument to support the conclusion of obviousness. The Office does not identify the elements of any of the cited references that allegedly correspond to the limitations unique to either of claims 13 or 14 (such as, for example, the distributor, the continuously revolving conveyor chain, or the plurality of clamping star wheels). The Office also does not provide any suggestion, support, or rationale as to why the asserted combination of Correggi in view of Jones, Lee, and Rogers would render the limitations unique to claims 13 and 14 obvious. As such, the rejections must be withdrawn because “rejections based on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *See In re Kahn*, 441 F.3d 977, 988 (CA Fed. 2006) cited with approval in *KSR Int'l v. Teleflex Inc.*, 127 S.Ct. 1727, 1740-1741 (2007). Accordingly, amended claim 13 is allowable.

Because claims 15-20 either directly or indirectly depend from allowable claim 13, these claims are also allowable for at least this reason.

**New Claims 21-24**

Applicants acknowledge with appreciation the Examiner's indication that claim 8 would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims. New claim 21 includes the limitations of claim 8, as well as all of the limitations of the base claim (previously presented claim 1) and the intervening claim (previously presented claim 7). Therefore, new claim 21 is allowable.

New claims 22-24 correspond to previously presented claims 2, 3, and 5, respectively. Because each of claims 22-24 depends from allowable claim 21, claims 22-24 are also allowable for at least this reason.

**Conclusion**

Applicants believe that each of the outstanding rejections, objections, and/or other concerns have either been accommodated, traversed or rendered moot. Therefore, the application is considered to be in condition for allowance. Should there remain any outstanding issue that the Office may be remedied via telephone conference, please contact the undersigned at (312) 474-6300.

It is believed that no fees are necessary in connection with the present Amendment. However, in the event any fees are due, kindly charge the cost thereof to our Deposit Account No. 13-2855.

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Respectfully submitted,

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